



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,585	09/04/2003	Chia-Che Chuang	67,200-1131	7927

7590 07/08/2005

TUNG & ASSOCIATES
Suite 120
838 W. Long Lake Road
Bloomfield Hills, MI 48302

EXAMINER

NGUYEN, THANH T

ART UNIT	PAPER NUMBER
----------	--------------

2813

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,585

Applicant(s)

CHUANG ET AL.

Examiner

Thanh T. Nguyen

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 9-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of group I, claims 1-8 in the reply filed on 3/25/05 is acknowledged.

Requirement for restriction practice are set forth in MPEP § 803.

There are two criteria for a proper requirement for restriction between patentable distinct inventions:

1. The inventions must be independent (see MPEP §§ 802.01, 806.04, 808.01) or distinct as claimed (see MPEP §§ 806.05-806.05(i)); and

2. There must be a serious burden on the examiner if restriction is not required (see MPEP §§ 803.02, 806.04(a)-(j), 808.01(a) and 808.02).

The traversal is on the ground(s) that claim 9 recites the primary steps of providing relative motion between said ingot and the polishing pad; and causing contact between said ingot and the polishing pad', can only be practiced by the apparatus defined in claim 1 pre-conditioning apparatus. This is not found persuasive because claims 1-8 drawn to a built-in pre-conditioning apparatus for pre-conditioning a substrate classified in 451/72 while claims 9-20 drawn to a method of pre-conditioning a polishing pad, classified in 438/692. Therefore, there is no reason why a search for group I must include a search for the group II as well. The existence of two distinct invention, as well as the different classification of two inventions, provide evidence of burden on the examiner in examining both inventions.

Art Unit: 2813

Since claims 1-8 are patentable distinct from claims 9-20. The distinctness between an apparatus of making to other method of making made is shown." MPEP § 806.04(f). Serious burden on the examiner is shown according to the criteria of MPEP § 808.02, where one of the following must be supported by appropriate explanation:

1. Separate classification thereof:

This shows that each distinct subject has attained recognition in the art as a separate subject for inventive effort, and also a separate field of search,. Patents need not be cited to show separate classification.

2. A separate status in the art when they are classifiable together;....

3. A different field of search

Applicant has not alleged that either device or process claims were improperly classified. Nor has applicant alleged that the classifications set forth are not "separate classifications." Thus requirement 2. of MPEP § 803 is met. For these reasons set forth above, the restriction requirement is proper.

The requirement is still deemed proper and is therefore made FINAL.

Oath/Declaration

Oath/Declaration filed on 9/4/03 has been considered.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation “a material” in claim 4 renders the claim indefinite. It is unclear what “material” applicant referring to. It is suggest to change to “wherein said ingot comprises a material”

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2813

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Berman (U.S. Patent No. 6,273,798).

Regarding to claim 1, a built-in pre-conditioning apparatus for pre-conditioning a substrate, comprising:

a pre-conditioning arm (114, see figure 2a-2b, col. 6, lines 16-67); and

an ingot (quartz called SiO₂) carried by the pre-conditioning arm (114/130/128) for engaging and pre-conditioning the substrate (112, polishing pad).

Regarding to claim 2, the ingot comprises silicon dioxide (see col. 6, lines 39-40, col. 7, lines 30-42).

Regarding to claim 3, an actuation mechanism operable engaging (138) the pre-conditioning arm (114) for selectively moving the ingot into and out of contact with the substrate (polishing pad, see col. 6, lines 28-67, col. 7, lines 1-67, figures 2a-2b).

Regarding to claim 4, a material comprises silicon oxide (see col. 6, lines 39-40, col. 7, lines 30-42).

Regarding to claim 5, the pre-conditioning arm comprises a support (138) and an ingot mount head (128/130) carried by the support (114/138), and wherein the ingot is carried by the ingot mount head (128/130).

Regarding to claim 6, the ingot comprises silicon oxide (see col. 6, lines 39-40, col. 7, lines 30-42).

Regarding to claim 7, an actuation mechanism operable engaging (138) the pre-conditioning arm (114) for selectively moving the ingot into and out of contact with the substrate (polishing pad, see col. 6, lines 28-67, col. 7, lines 1-67, figures 2a-2b).

Art Unit: 2813

Regarding to claim 8, the ingot comprises silicon oxide (see col. 6, lines 39-40, col. 7, lines 30-42).

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsai et al. (U.S. Publication No. 2002/80098779).

Regarding to claim 1, a built-in pre-conditioning apparatus for pre-conditioning a substrate, comprising:

a pre-conditioning arm (155, see figure 2, paragraph# 28); and

an ingot (copper plate, 160) carried by the pre-conditioning arm (155) for engaging and pre-conditioning the substrate (polishing pad, see paragraph# 33, 41).

Regarding to claim 2, the ingot (162) comprises copper (see paragraph# 15, 41).

Regarding to claim 3, an actuation mechanism operable engaging (140/145/150) the pre-conditioning arm (155) for selectively moving the ingot into and out of contact with the substrate (polishing pad, see paragraph# 28, 33).

Regarding to claim 4, a material comprises copper (see paragraph# 15, 41).

Regarding to claim 5, the pre-conditioning arm comprises a support (145) and an ingot mount head (162) carried by the support (145), and wherein the ingot is carried by the ingot mount head (160, see figure 2).

Regarding to claim 6, the ingot comprises copper (see paragraph# 15, 41).

Regarding to claim 7, an actuation mechanism operable engaging (140/145/150) the pre-conditioning arm (155) for selectively moving the ingot into and out of contact with the substrate (polishing pad, see paragraph# 28, 33).

Art Unit: 2813

Regarding to claim 8, the ingot comprises copper (see paragraph# 15, 41).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Nguyen whose telephone number is (571) 272-1695, or by Email via address Thanh.Nguyen@uspto.gov. The examiner can normally be reached on Monday-Thursday from 6:00AM to 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, can be reached on (571) 272-1702. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956 (**See MPEP 203.08**).

A handwritten signature in black ink, appearing to read 'Thanh', with a long horizontal stroke extending to the left.

Thanh Nguyen
Patent Examiner
Patent Examining Group 2800

TTN